SHARP

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PIN

Printed in Poland
Gedruckt in Polen
Imprimé en Pologne
Stampato in Polonia
Afgedrukt in Polen
Impreso en Polonia
Impresso na Polónia

P41G7830843 TBD

LC-19SH7E/LC-26SH7E/LC-32SH7E/LC-42SH7E

OPERATION MANUAL / BEDIENUNGSANLEITUNG / MODE D'EMPLOI / MANUALE DI ISTRUZIONI / GEBRUIKSAANWIJZING / MANUAL DE MANEJO / MANUAL DO UTILIZADOR

SHARP 1

SHARP®

LC-19SH7E
LC-26SH7E
LC-32SH7E
LC-42SH7E

LCD COLOUR TELEVISION
LCD-FARBFERNSEHGERÄT
TÉLÉVISEUR COULEUR À ÉCRAN CRISTAUX LIQUIDES (LCD)
TELEVISORE A COLORI LCD
LCD-KLEURENTELEVISIE
TELEVISIÓN EN COLOR LCD
TELEVISOR LCD A CORES

ENGLISH
DEUTSCH
FRANÇAIS
ITALIANO
NEDERLANDS
ESPAÑOL
PORTUGUESE

OPERATION MANUAL
BEDIENUNGSANLEITUNG
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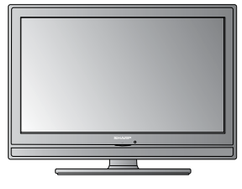
MANUAL DO UTILIZADOR



LC-19SH7E / LC-26SH7E / LC-32SH7E

HD TV · HD ready · DVB Digital Video Broadcasting · DOLBY DIGITAL PLUS · HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

LC-42SH7E

HD TV 1080p · HD ready · DVB Digital Video Broadcasting · DOLBY DIGITAL PLUS · HDMI HIGH-DEFINITION MULTIMEDIA INTERFACE

OPERATION MANUAL ENGLISH

- The illustrations and on-screen displays in this operation manual are for explanation purposes and may vary slightly from the actual operations.

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Introduction

Dear SHARP customer

Thank you for your purchase of the SHARP LCD colour TV product. To ensure safety and many years of trouble-free operation of your product, please read the Important Safety Precautions carefully before using this product.

Important Safety Precautions

- Cleaning—Unplug the AC cord from the AC outlet before cleaning the product. Use a damp cloth to clean the product. Do not use liquid cleaners or aerosol cleaners.
- Water and moisture—Do not use the product near water, such as bathtub, washbasin, kitchen sink, laundry tub, swimming pool and in a wet basement.
- Do not place vases or any other water-filled containers on this product.
  The water may spill onto the product causing fire or electric shock.
- Stand—Do not place the product on an unstable cart, stand, tripod or table. Doing so can cause the product to fall, resulting in serious personal injuries as well as damage to the product. Use only a cart, stand, tripod, bracket or table recommended by the manufacturer or sold with the product. When mounting the product on a wall, be sure to follow the manufacturer's instructions. Use only the mounting hardware recommended by the manufacturer.

- When relocating the product placed on a cart, it must be moved with utmost care. Sudden stops, excessive force and uneven floor surface can cause the product to fall from the cart.
- Ventilation—The vents and other openings in the cabinet are designed for ventilation. Do not cover or block these vents and openings since insufficient ventilation can cause overheating and/or shorten the life of the product. Do not place the product on a bed, sofa, rug or other similar surface, since they can block ventilation openings. This product is not designed for built-in installation; do not place the product in an enclosed place such as a bookcase or rack, unless proper ventilation is provided or the manufacturer's instructions are followed.
- The LCD panel used in this product is made of glass. Therefore, it can break when the product is dropped or impact applied. If the LCD panel is broken, be careful not to be injured by broken glass.

- Heat sources—Keep the product away from heat sources such as radiators, heaters, stoves and other heat-generating products (including amplifiers).
- To prevent fire, never place any type of candle or naked flames on the top or near the TV set.
- To prevent fire or shock hazard, do not place the AC cord under the TV set or other heavy items.
- Do not display a still picture for a long time, as this could cause an afterimage to remain.
- There is power consumption always if main plug is connected.
- Servicing—Do not attempt to service the product yourself. Removing covers can expose you to high voltage and other dangerous conditions. Request a qualified person to perform servicing.
- For ventilation, leave at least 4" to 6" free all around the TV. Do not place the TV on a carpet.
- The equipment shall not be exposed to dripping or splashing.
- The equipment shall not be exposed to rain or moisture and objects filled with liquids, such as vases, shall be placed on the apparatus.
- The appliance coupler is used as the disconnect device of this apparatus, the disconnect device shall remain readily operable.

The LCD panel is a very high technology product, giving you fine picture details.
Due to the very large number of pixels, occasionally a few non-active pixels may appear on the screen as a fixed point of blue, green or red.
This is within product specifications and does not constitute a fault.

Precautions when transporting the TV

When moving the TV, it should always be carried by two people, using both hands, be careful not to apply pressure to the display.

Wall mounting

Installing the LCD Colour TV requires special skill that should only be performed by qualified service personnel. Customers should not attempt to do the work themselves. SHARP bears no responsibility for improper mounting or mounting that results in accident or injury.

Remote control unit

(POWER)
Press to turn the LCD TV on or enter standby mode.

(INPUT SOURCE)
Select an input source.

0-9 DIGIT BUTTONS
To select a TV channel directly.

EPG
Press this button to display electronic programme guide when watching digital channels.

PRE PR
To display the previous selected TV channel.

HDMI
Press this button you could select **HDMI** (19") / **HDMI 1**(26", 32", 42") / **HDMI 2** (26", 32", 42") / **HDMI 3** (32", 42").

YPbPr
Press this button you could select **YPbPr**.

VIDEO
Press this button you could select **AV** / **SCART 1** / **SCART 2** (26", 32", 42")

PC
Press to direct to the **PC** mode.

(+/-)
Press to adjust the volume.

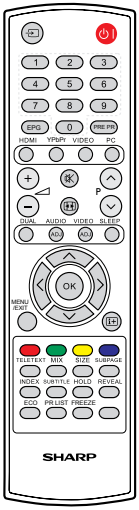
Press to toggle audio on and off. You can also press **(+/-)** to restore the previous volume level.

(Picture format)
Select picture format to **Auto** / **Normal** / **Zoom 1**/ **Zoom 2** / **Wide.**

P (∧/∨)
Press to select the channel.

DUAL
Select **MONO** / **STEREO** / **DUAL 1** / **DUAL 2** for ATV channel. Select Audio language for DTV channel.

AUDIO (ADJ)
Press to set the LCD TV to a predefined sound setting.
Personal / Music / Speech



VIDEO (ADJ)
Press to set the LCD TV to a predefined picture setting.
Personal / Standard / Vivid / Movie / Eco

SLEEP
Press to turn the LCD TV off within an amount of time. (10 ~ 120 minutes.)

∧∨<>
Press ∧ ∨ < > to navigate and confirm your selection.

OK
Press to activate a setting.

MENU / EXIT
Press to activate the LCD TV OSD. Press again to exit the LCD TV OSD.

Display programme information, if available.

R/G/Y/B (COLOUR BUTTON)
Press buttons to select the pictures with various colours of text. Different channels display different functions.

TELETEXT
Press this button to activate Teletext. Press again to turn off Teletext.

MIX
Press this button to activate Teletext with TV.

SIZE
Press this button to change the font size: Full screen, Top half and Bottom half.

SUBPAGE
To select the subpage when the current page contains subpage(s).

INDEX
Press this button to return to page 100 or the index page; and then press 0 to 9. The teletext page will be numbered and added to the page you select or the secondary item.

SUBTITLE
For DTV, press this button to toggle off / between available subtitle languages.
For ATV, press this button to toggle off / between available subtitle pages in Teletext.

HOLD
Press this button to stop the scrolling of pages.
The text decoder stops receiving data.

REVEAL
Reveal hidden information such as answers to a quiz.

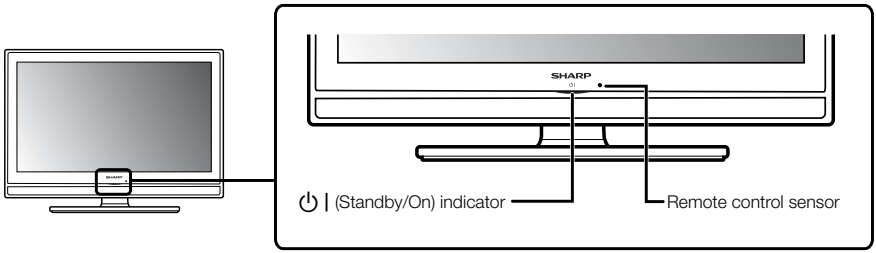
ECO
Press this button to set the picture with less brightness for saving energy.

PR LIST
Press to display a list of channels. Then press **Red button** to select the digital or analogue channel list. (Only available when your input source is TV).

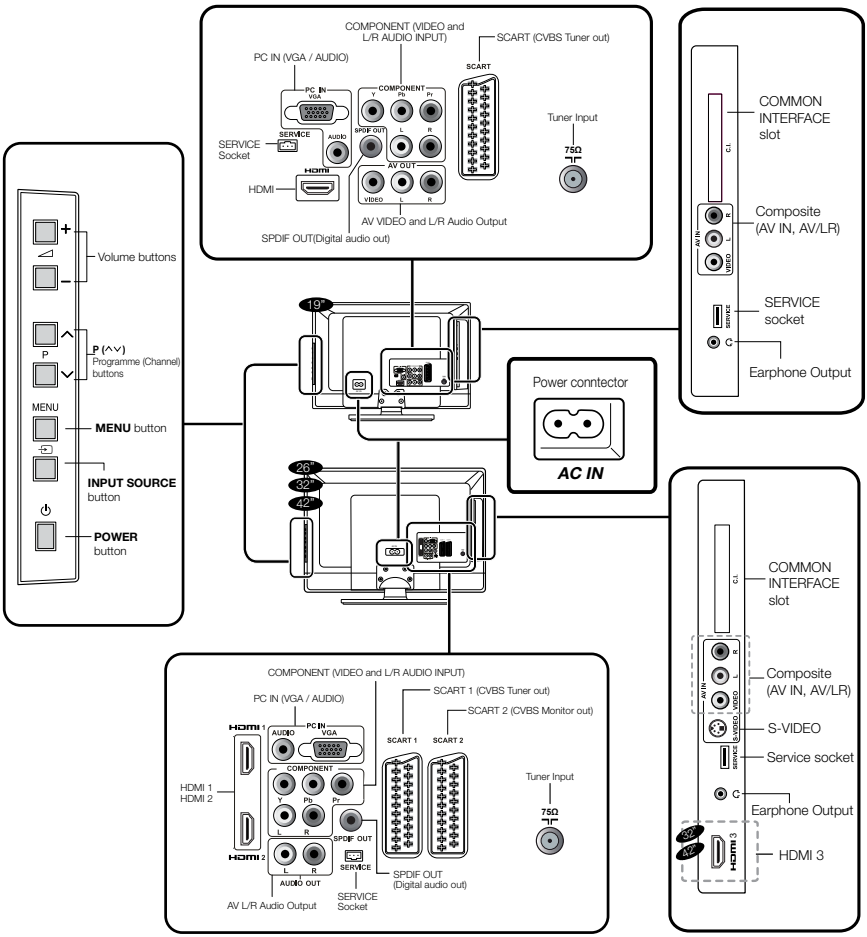
FREEZE
Press to freeze a moving image on the screen. (Only available when your input source is TV).
Scart output signal will also be frozen when you are watching digital channels.

Introduction

TV (Front view)

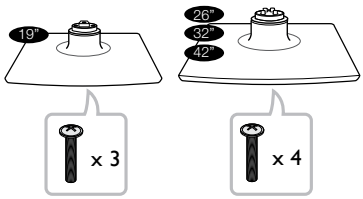


TV (Rear view)

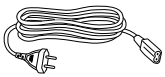


Supplied accessories

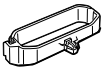
Stand unit and screws



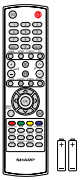
AC cord (x1)
Product shape varies in some countries



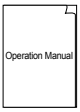
Cable clamp (x1)
Attached in back of the TV.



Remote control (×1)
AAA battery (×2)

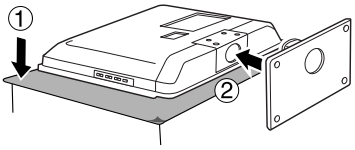


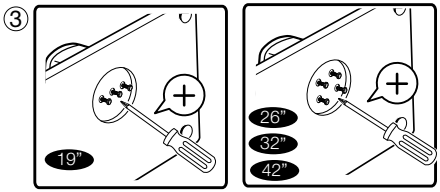
Operation Manual



Quick Setup Guide

Mount the TV stand



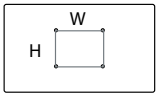


1. Put the TV face down on a safe surface that is covered by a soft and smooth cloth.
2. Adjust the TV stand to the bottom of the TV.
3. Fasten the screws by using a cross-head screwdriver (Not supplied).

NOTE

- To detach the TV stand, perform the steps in reverse order.

Wall mounting

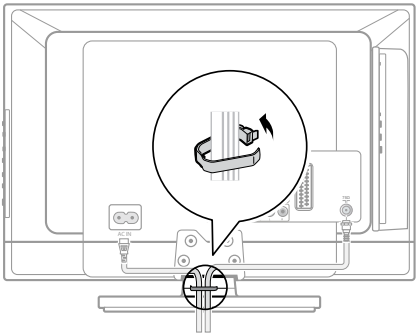


TV screen size (Inches)	VESA-compatible wall bracket (millimeters) (W x H)	Screw type
19”	100 x 100 mm	Metric 4 x 10 mm
26”	200 x 100 mm	Metric 4 x 10 mm
32”	200 x 200 mm	Metric 6 x 10 mm
42”	400 x 200 mm	Metric 6 x 10 mm

NOTE

- At the time of purchasing wall bracket, please check if there is enough space between the wall bracket and TV terminals for the terminal connection.

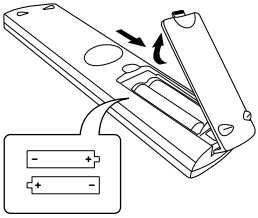
Bundling the cables



Installation of batteries

1. Insert two AAA batteries into Remote control. Make sure (+) and (−) are facing the proper direction.

2. Replace the cover.



NOTE

- If the remote control will not to be used for a long time, remove the batteries to avoid remote control damage.

CAUTION

Improper use of batteries can result in chemical leakage or explosion. Be sure to follow the instructions below.

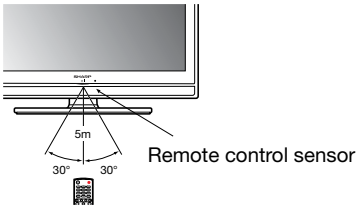
- Do not mix batteries of different types. Different types of batteries have different characteristics.
- Do not mix old and new batteries. Mixing old and new batteries can shorten the life of new batteries or cause chemical leakage in old batteries.
- Remove batteries as soon as they have worn out. Chemicals that leak from batteries can cause a rash. If you find any chemical leakage, wipe thoroughly with a cloth.
- The batteries supplied with this product may have a shorter life expectancy due to storage conditions.
- If you will not be using the remote control unit for an extended period of time, remove the batteries from it.

Note on disposing batteries:

The batteries provided contain no harmful materials such as cadmium, lead or mercury.
Regulations concerning used batteries stipulate that batteries may no longer be thrown out with the household rubbish. Deposit any used batteries free of charge into the designated collection containers set up at commercial businesses.

Using the remote control

Use the remote control unit by pointing it towards the remote control sensor. Objects between the remote control unit and sensor may prevent proper operation.



Display the Menu Screen

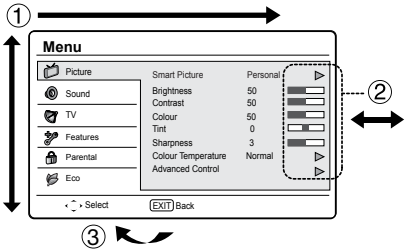
Press **MENU / EXIT** and the menu screen displays.

Select an item by the remote control

1. Press ∧∨> to select the desired menu.

2. Press <> to select / adjust the item to the desired level. The setting on screen is applied immediately.

3. Press **MENU / EXIT** to return to the previous layer .



Exit the Menu Screen

The operation will exit the menu screen if you press **MENU / EXIT** before it is complete.

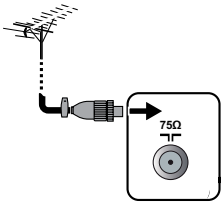
Quick guide

Initial installation overview

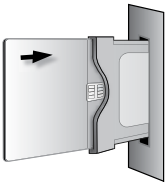
Follow the below steps one by one when using the TV for the first time. Some steps may not be necessary depending on your TV installation and connection.

1 Preparation

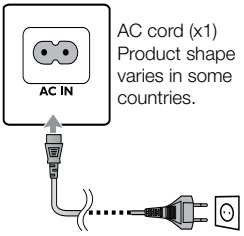
❶ Connect antenna cable to the antenna terminal.



❷ If necessary, insert CA card into the CI slot to watch scrambled broadcasts.



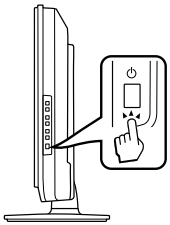
❸ Connect the AC cord to the TV.



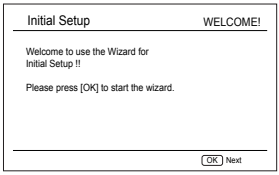
AC cord (x1)
Product shape varies in some countries.

2 Power on and run the auto installation

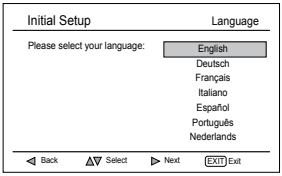
❶ Turn on the TV power with ⏻.



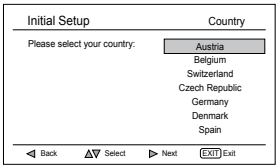
❷ Run the initial auto installation.



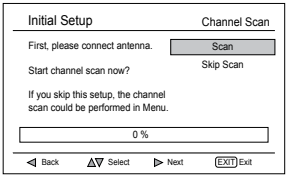
✔ **Language setting**

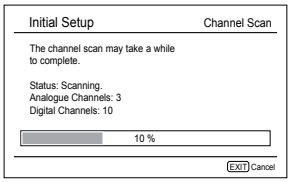


✔ **Country setting**



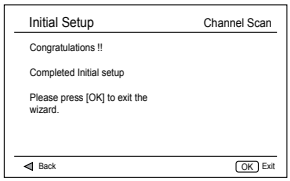
✔ **Start searching channels**





3 Watch TV

❶ Congratulations! Now you can watch TV.

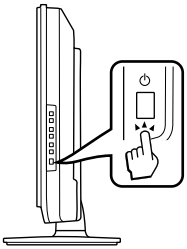


❷ If necessary, adjust the antenna to attain maximum signal reception.

Daily operation

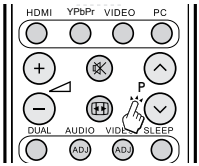
Turning on/off the power

Press ⏻ on the TV.
Switch it off by pressing ⏻ on the TV.



Changing channels

With **P∧∨:**



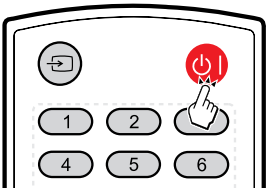
Standby mode

To standby mode

If the TV set is switched on, you can switch it to standby by pressing ⏻ | on the remote control.

Switching on from standby

From standby, press ⏻ | on the remote control.



TV indicator status

⏻ | indicator	Status
Off	Power off
Green	Power on
Red	Standby

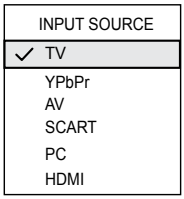
NOTE

- If you are not going to use this TV for a long period of time, be sure to remove the AC cord from the power outlet.
- A small amount of electric power is still consumed even when ⏻ | is turned off.

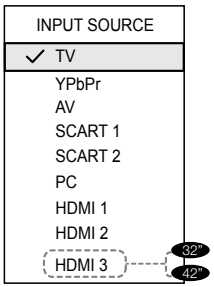
Selecting external video source

Once the connection is made, press ⏎ to display the **INPUT SOURCE** screen, and then press ∧∨ to switch over to the appropriate external source with **OK**

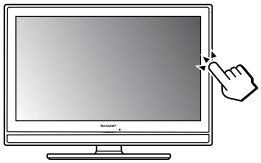
19”



26” / 32” / 42”



Operation without a remote control



This function is useful when there is no remote control within your reach.

1. Press **MENU** briefly to display the direct control screen.
2. Press **P** ∧∨ instead of ∧/∨ or ◢ +/− instead of <> to select the item.
3. Press **MENU** to confirm the selection.

NOTE

- The direct control menu screen will disappear if left unattended for several seconds.

EPG (Electronic Programme Guide)

EPG is an on-screen guide that displays scheduled digital TV programmes. This guide is not available with analogue channels. You can navigate, select and view programmes.
There are two types of EPG, “Now and Next” and “7 or 8 day” EPG. “Now and Next” is always available but the “7 or 8 day” EPG is only available in certain countries.

With the EPG menu you can:

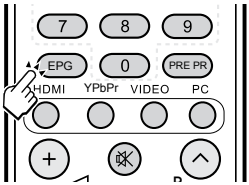
- View a list of currently broadcast digital programmes.
- View upcoming programmes.

Switch on EPG

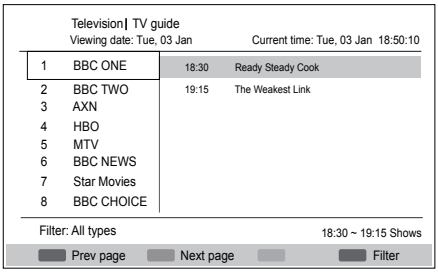
NOTE

- The first time you use EPG, you may be prompted to perform an update. If so, follow the on-screen instructions.

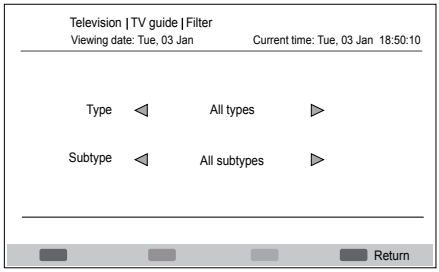
1. Press **EPG** on the remote control, the “Now and Next” EPG will appear and the detailed information about the current programme is displayed.



2. Use the **colour buttons** on the remote control to activate available actions.



- **Prev page** (Red): List the previous day’s EPG.
- **Next page** (Green): List the next day’s EPG.
- **Detail** (Yellow): Displays the information of your highlighted programme.
- **Filter** (Blue): Sets the type of the channel list.



3. Press **EPG** or **MENU / EXIT** to exit .

Teletext

What is Teletext?
Teletext broadcasts pages of information and entertainment to specially equipped television sets. Your TV receives Teletext signals broadcast by a TV network, and decodes them into graphical format for viewing. News, weather and sports information, stock exchange prices and programme previews are among the many services available.

Turning on and off Teletext

1. Select a TV channel or external source providing a Teletext programme.
2. Press **TELETEXT** to display Teletext.
   - Many stations use the TOP operating system, while some use FLOF (e.g. CNN). Your TV supports both these systems. The pages are divided into topic groups and topics. After switching on the teletext, up to 1000 pages are stored for fast access.
   - If you select a programme with no Teletext signal, “No Teletext ” displays.
   - The same message displays during other modes if no Teletext signal is available.

NOTE
- Teletext will not work if the selected signal type is RGB.

Buttons for teletext operations

Buttons	Description
P (∧∨)	Increase or decrease the page number.
Colour (R/G/Y/B)	Select a group or block of pages displayed in the coloured brackets at the bottom of the screen by pressing the corresponding **Colour (R/G/Y/B)** on the remote control unit.
0 - 9	Directly select any page from 100 to 899 by using **0** - **9**.
MIX	Press this button to activate Teletext with TV.
SIZE	Switch the Teletext image to Top, Bottom or Full.
INDEX	Press this button to return to page 100 or index page.
HOLD	Stop updating Teletext pages automatically or release the hold mode.
REVEAL	Reveal or hide hidden information such as an answer to a quiz.
SUBPAGE	Select the subpage when the current page contains subpage(s). Press number buttons on the remote control to access the subpage directly. (two digits)

Select a Teletext language

1. Press **MENU / EXIT** on the remote control and press **Features** > **Teletext Language**.
2. Press **OK** or > to enter **Teletext Language** menu and press ∧∨ to select one of the following.
   - **Digital Teletext Lang.**
   - **Decode Page Lang.**
3. Highlight your selection and press <>to make a selection.
4. Follow the on-screen instructions to exit.

Using the MHEG5 application (UK only)

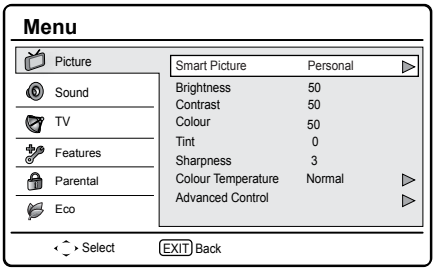
Some services bring you programmes with the MHEG (Multimedia and Hypermedia Expert Group) application encoded, letting you experience DTV interactively. When provided, the MHEG5 application will start when you press the **R** button.

Sample MHEG5 screen

Picture

Adjust picture settings

1. Press **MENU / EXIT** on the remote control and select **Picture**.
2. Press **OK** or > to enter the list.



3. Press ∧ ∨ to select one of the following settings:
   - **Brightness:** Changes the level of light in the picture.
   - **Contrast:** Changes the level of bright parts in the picture keeping the dark parts unchanged.
   - **Colour:** Changes the level of saturation.
   - **Tint:** Changes the colours to reddish or bluish.
   - **Sharpness:** Changes the level of sharpness of fine details.
   - **Colour temperature:** Sets the colour temperature to **Cool** (bluer), **Normal** (balanced), **Warm** (redder).
   - **Advanced Control:** Press > to enter and press ∧ ∨ to select one of the following item:
     * **Noise Reduction:** Filters and reduces the noise in the picture. Selects the level to **Low** / **Medium** / **High** / **Auto**. Or select **Off** to disable this function.
     * **Flesh Tone:** Selects **On** to set the flesh colour to be more natural.
     * **Back light:** Adjusts the background brighter or darker.
     * **DCR (Dynamic contrast ratio):** Enhances the contrast in the picture as the image on the screen changes. Press < > to switch active control **On** or **Off**.
4. Press < > to select / adjust the item to the desired level.
5. Follow the on-screen instructions to exit.

Use smart picture

Apart from manually adjusting picture settings, you can use **Smart picture** to set your TV to a predefined picture setting.

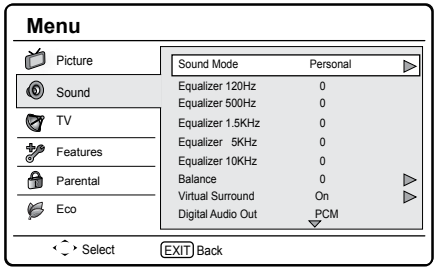
1. Press **MENU / EXIT** on the remote control and select **Picture**.
2. Press **OK** or > to enter **Picture** and select **Smart Picture.**
3. Press < > to select one of the following settings:
   - **Personal**
   - **Standard**
   - **Vivid**
   - **Movie**
   - **Eco**
4. Follow the on-screen instructions to exit.

Sound

Adjust sound settings

This section describes how to adjust sound settings.

1. Press **MENU / EXIT** on the remote control and select **Sound**.
2. Press **OK** or > to enter the list.



3. Press ∧ ∨ to select one of the following settings:
   - **Equalizer 120Hz (Bass):** Adjusts the amount of bass.
   - **Equalizer 500Hz (Tenor):** Adjusts the amount of tenor.
   - **Equalizer 1.5KHz (Neutral):** Adjusts the amount of neutral.
   - **Equalizer 5KHz (Treble):** Adjusts the amount of treble.
   - **Equalizer 10KHz (Descant):** Adjusts the amount of descant.

- **Balance:** Sets the balance of the left and right speakers to best fit your listening position.
- **Virtual Surround:** Automatically switches the TV to the best surround sound mode available from a broadcast. Select **On** or **Off**.
- **Digital Audio Out:** Selects the type of digital audio out to **PCM** / **Off** / **Dolby Digital**.
- **AVL (Auto volume leveling):** Reduces sudden volume changes, for example, during commercials or when switching from one channel to another. Select **On** or **Off**.
- **Type:** (Only available for Digital channels.) Selects the type of audio broadcast.
  - **Normal:** Sets regular audio only.
  - **Hard of Hearing:** Sets the mix of hearing impaired audio with regular audio.
  - **Audio Description:** Sets the mix of visually impaired audio with regular audio.
- **Audio Description:** (Only appears when you select **MENU / EXIT** > **Sound** > **Type** > **Audio Description**): Adjusts the volume of visually impaired audio.

4. Press < > to select / adjust the item to the desired level.

5. Follow the on-screen instructions to exit.

Use Sound Mode

Apart from manually adjusting sound settings, you can use **Sound Mode** to set your TV to a predefined sound setting.

1. Press **MENU / EXIT** on the remote control and select **Sound**.

2. Press **OK** or > to enter **Sound** and select **Sound Mode.**

3. Press < > to select one of the following settings:
- **Personal**
- **Music**
- **Speech**

4. Follow the on-screen instructions to exit.

TV

The first time you set up your TV, you are prompted to select an appropriate menu language and to perform automatic installation of TV and digital radio channels (If available).
This chapter provides instructions on how to reinstall channels as well as other useful channel installation features.

NOTE
- Re-installing channels modifies the channel list.

Select a digital audio language

1. Press **MENU / EXIT** on the remote control and select **TV**.

2. Press **OK** or > to enter **TV** menu.

3. Press ∧∨ to select **1st Audio** or **2nd Audio**.

4. Highlight your selection and press < > to select an audio language.

5. Follow the on-screen instructions to exit.

NOTE
- If your selected audio language is not broadcasted, the default audio language will be displayed.

Automatically install channels

This section describes how to search and store channels automatically. Instructions are for both digital and analogue channels.

Step 1: Select your menu language

1. Press **MENU / EXIT** on your remote control and select **Features** > **Menu language**.

2. Press < > to select your language.

3. Follow the on-screen instructions to exit.

Step 2: Select your country

Select the country where you are located. The TV installs and arranges channels according to your country.

1. Press **MENU / EXIT** on the remote control and select **TV** > **Country**.

2. Press < > or to select your country.

3. Follow the on-screen instructions to exit.

Step 3: Automatic installation

Your TV searches and stores all available digital and analogue TV channels as well as all available digital radio channels.

1. Press **MENU / EXIT** on the remote control and select **TV** > **Channels.**

NOTE
- You are prompted to enter current password to enter **Channels** if **Channel Block** /**Parental Guidance** / **Input Block** in the **Parental** menu is not the default setting.

2. Select **Channel Scan** and press **OK** or > to start channel installation. The installation may take a few minutes.

3. When complete, follow the on-screen instructions to exit.

Update Scan

Update Scan has similar function with **Channel Scan**. The difference is you could update channel list without erasing the original information.

1. Press **MENU / EXIT** on the remote control and select **TV** > **Channels**.

NOTE
- You are prompted to enter current password to enter **Channels** if **Channel Block** /**Parental Guidance** / **Input Block** in the **Parental** menu is not the default setting.

2. Press ∧∨ to select **Update Scan** and press **OK** or > to start channel update.

3. When complete, follow the on-screen instructions to exit.

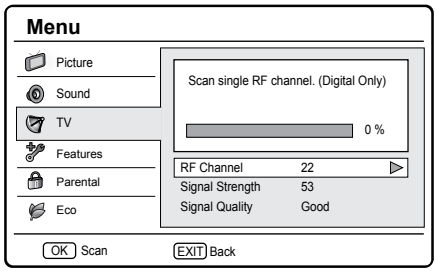
Single RF Scan

If using digital broadcasts, you can check the quality and signal strength of digital channels. This allows you to reposition and test your antenna or satellite dish.

1. Press **MENU / EXIT** on the remote control and select **TV** > **Channels**.

NOTE
- You are prompted to enter current password to enter **Channels** if **Channel Block** /**Parental Guidance** / **Input Block** in the **Parental** menu is not the default setting.

2. Press ∧∨ to select **Single RF Scan** and press **OK** or > to enter.



3. Highlight the **RF Channel** box, and press <> to select a channel number you preferred to scan.

4. Press **OK** to start scanning.

5. When the scan is completed, the result of signal strength and signal quality appear on the screen.

6. Follow the on-screen instructions to exit.

NOTE
- If the signal quality and strength is poor, reposition the antenna or satellite dish and retest.
- If you have further problems with the reception of your digital broadcast, contact a specialised installer.

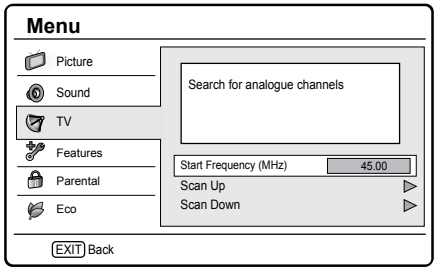
Analogue Manual Scan

This section describes how to search and store analogue TV channels manually.

1. Press **MENU / EXIT** on the remote control and select **TV** > **Channels**.

NOTE
- You are prompted to enter current password to enter **Channels** if **Channel Block** /**Parental Guidance** / **Input Block** in the **Parental** menu is not the default setting.

2. Press ∧∨ to select **Analogue Manual Scan** and press **OK** or > to enter.



3. In the **Start Frequency (MHz)** box, enter the frequency by using the **digit buttons** on the remote control.
4. Press ∧∨ to select **Scan Up** or **Scan Down** to scan the next available analogue channel from the frequency you have entered.
5. Press **OK** or > to start scanning.
6. When complete, follow the on-screen instructions to exit.

Channel Skip

Channel skip allows you to skip one or more channels when pressing **P** ∧∨ on the remote control to switch between channels.

1. Press **MENU / EXIT** on the remote control and select **TV** > **Channels.**

NOTE
- You are prompted to enter current password to enter **Channels** if **Channel Block** /**Parental Guidance** / **Input Block** in the **Parental** menu is not the default setting.

2. Press ∧∨ to select **Channel Skip** and press **OK** or > to enter the channel list.
3. Press ∧∨ to select one or more channels you preferred to skip.
4. Press **OK** to mark or cancel.
5. Follow the on-screen instructions to exit.

NOTE:
- To watch the skipped channels, enter the channel numbers by using the **digit buttons** on the remote control or select from **PR LIST**.

Channel Sort

Channel sort allows you to reorder the channels in the **PR LIST**.

1. Press **MENU / EXIT** on the remote control and select **TV** > **Channels.**

NOTE
- You are prompted to enter current password to enter **Channels** if **Channel Block** /**Parental Guidance** / **Input Block** in the **Parental** menu is not the default setting.

2. Press ∧∨ to select **Channel Sort** and press **OK** or > to enter the channel list.
3. Press ∧∨ to select one channel and press **OK** to mark.
4. Press ∧∨ to select another channel and press **OK** to mark. The two channels your marked are exchanged.
5. Repeat step 3 to 4 to reorder more channels.
6. Follow the on-screen instructions to exit.

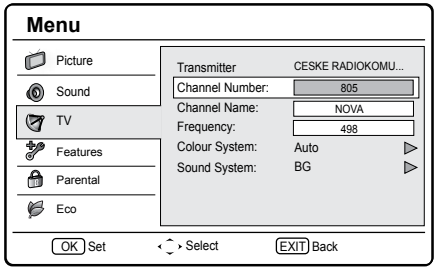
Channel Edit

Channel edit allows you to change the channel number or the channel name.

1. Press **MENU / EXIT** on the remote control and select **TV** > **Channels.**

NOTE
- You are prompted to enter current password to enter **Channels** if **Channel Block** /**Parental Guidance** / **Input Block** in the **Parental** menu is not the default setting.

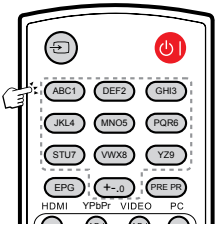
2. Press ∧∨ to select **Channel Edit** and press **OK** or > to enter the channel list.
3. Press ∧∨ to select one channel you prefer to edit.
4. Press **OK** to enter.



5. Press ∧∨ to highlight one of the following:

- **Channel Number:** Enter a new channel number by using the **digit buttons** on the remote control
- **Channel Name:** Press the **digit buttons** on the remote control to rename the channel. Please refer to the graphic below for available characters. (Press each button repeatedly to change between characters.)

0-9 digit buttons with available characters



- **Frequency:** Use **digit buttons** on the remote control to enter the frequency. (Only for analogue channels).
- **Colour System:** Press < > to select the colour system. (Only for analogue channels)
- **Sound System:** Press < > to select the sound system. (Only for analogue channels)

6. Follow the on-screen instructions to exit.

NOTE
- The new channel number you have entered can not override the exist one.

Analogue Ch Fine Tune

You can manually fine tune analogue channels when reception is poor.

1. Press **MENU / EXIT** on the remote control and select **TV** > **Channels**.

NOTE
- You are prompted to enter current password to enter **Channels** if **Channel Block** / **Parental Guidance** / **Input Block** in the **Parental** menu is not the default setting.

2. Press ∧∨ to select **Analogue Ch Fine Tune** and press **OK** or > to enter the analogue channel list.

3. Press ∧∨ to select one channel and press **OK** to enter.

4. Press < > to adjust the frequency.

5. When complete, press **OK** to set the frequency. The fine tuned channel is stored under the current channel number.

6. Follow the on-screen instructions to exit.

Assign a channel decoder (For ATV)

Decoders that decode channels can be connected to SCART. You have to assign the TV channel as a channel to be decodered. Before selecting channels, make sure your TV is connected to SCART.

1. Press **MENU / EXIT** on the remote control and select **TV** > **Channels.**

NOTE
- You are prompted to enter current password to enter **Channels** if **Channel Block** /**Parental Guidance** / **Input Block** in the **Parental** menu is not the default setting.

2. Press ∧∨ to select **Decoder** and press **OK** or > to enter available analogue channel list.

3. Press ∧∨ to select the channel to decode.

4. Press **OK** to mark or cancel.

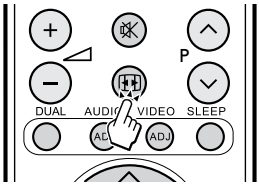
5. Follow the on-screen instructions to exit.

Features

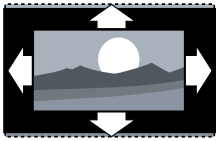
Change picture format

Change the picture format to suit your content.

1. Press repeatedly to select one of the following picture formats. Alternatively, press **MENU / EXIT** and select **Features** > **Picture format**.

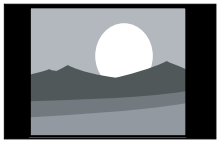


Auto



The Automatic format for DTV transports streams with AFD information, while for ATV and SCART should be with WSS information.

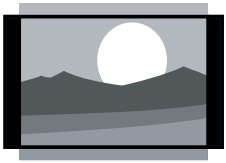
Normal (Not for HD)



Displays the classic 4:3 format.

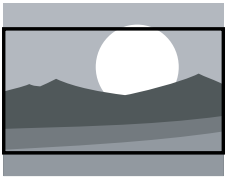
NOTE
- Constant use of the **Normal** picture format can cause screen distortion.

Zoom 1 (Not for HD)



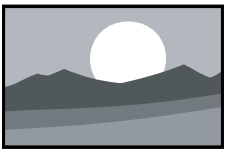
Scales the classic 4:3 format to 14:9.

Zoom 2 (Not for HD)



Scales the classic 4:3 format to 16:9.

Wide



Stretches the classic 4:3 format to 16:9.

NOTE

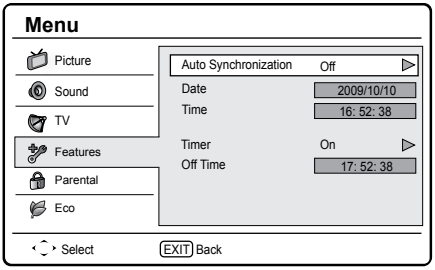
- When source input is PC mode, only Full screen and 4:3 are available.
- For 4:3 PC input signal, picture format 4:3 and Wide screen are available.
- For other input signals, only Wide screen is available.

Change the time zone

1. Press **MENU / EXIT** on your remote control and select **Features** > **Time**.
2. Press **OK** or > to enter **Time**.
3. Select **Time zone** and press <> to select your time zone.
4. Follow the on-screen instructions to exit.

Set the clock

1. Press **MENU / EXIT** on the remote control and select **Features** > **Time**.
2. Press **OK** or > to enter **Time** menu.
3. Press ∧∨ to select **Time** and press **OK** or > to enter.



4. Select **Auto Synchronization** and press <> to select:
   - **On:** Sets the clock automatically the same with the digital signal time. (Only if digital signal is available).
   - **Off:** Press ∧∨ to set your system **Date** or system **Time** manually by using the **digit buttons** on your remote control.
5. When the clock setting is completed, follow the on-screen instructions to exit.

Automatically switch the TV off (Off time)

Off time switches the TV to standby at a specified time.

NOTE

- Before using off time function, you have to set the time on your TV correctly. (See page 16 ***"Set the clock"***)

1. Press **MENU / EXIT** on the remote control and select **Features** > **Time**.
2. Press **OK** or > to enter **Time** menu.
3. Press ∧∨ to select **Time** and press **OK** or > to enter.
4. Press ∨ to select **Timer** and press <> to select:
   - **Off:** Disable **Timer**.
   - **On:** Press ∨ to highlight the **Off Time** box and set and power off time by using the **digit buttons** on your remote control.
5. Follow the on-screen instructions to exit.

Automatically switch the TV to standby (Sleep timer)

Sleep timer switches the TV to standby after a defined period of time.

1. Press **MENU / EXIT** on the remote control and select **Features** > **Time**.
2. Press **OK** or > to enter **Time**.
3. Press ∧∨ to select **Sleep Timer.**
4. Press <> to select the period of time before TV enters to standby.
5. Follow the on-screen instructions to exit.

NOTE

- When you press any button on the remote control with less than three minutes left in the countdown, Sleep timer will be automatically canceled.

TV menu

Use subtitles

You can enable subtitles for each TV channel. Subtitles are broadcasted via teletext or DVB-T digital broadcasts. With digital broadcasts, you have the additional option of selecting a preferred subtitle language.

Set analogue subtitles

1. Press **MENU / EXIT** on the remote control and select **Features** > **Subtitle.**
2. Press **OK** or > to enter **Subtitle**.
3. Select **Analogue Subtitle**.
4. Press <> to select **On** to display subtitle always or **On During Mute** to display subtitles only when audio is muted. Select **Off** to close subtitles.
5. Follow the on-screen instructions to exit.

Select a subtitle language on digital TV channels

When you select a subtitle language on a digital TV channel as described below, the preferred subtitle language set in the **TV** menu is temporarily overruled.

1. Press **MENU / EXIT** on the remote control and select **Features** > **Subtitle.**
2. Press **OK** or > to enter **Subtitle**.
3. Press ∧∨ to select **1st Subtitle** or **2nd Subtitle**.
4. Highlight your selection and press <> to select a subtitle language.
5. Follow the on-screen instructions to exit.

NOTE

- If your selected subtitle language is not broadcasted, the default language subtitle will be displayed.
- If the **1st Subtitle** language you selected is not available, the **2nd Subtitle** language will be displayed.

Select Hearing impaired subtitle

When watching channels with hearing impaired service, you can enable the subtitle commentary for the hearing handicapped. For digital channels only.

1. Press **MENU / EXIT** on the remote control and select **Features** > **Subtitle**.
2. Press **OK** or > to enter **Subtitle**.
3. Press ∧∨ to select **Subtitle Type**.
4. Press <> to select **Hearing impaired** as your subtitle type.
5. Follow the on-screen instructions to exit.

HDMI overscan

When you watch TV via HDMI input source, you could use this function to enlarge the picture. It may have few loss of video content.

1. Press **MENU / EXIT** on the remote control and select **Features** > **HDMI Scan info**
2. Press <> to select one of the following:
   - Select **Auto** to scan the picture automatically.
   - Select **Underscan** to disable.
   - Select **Overscan** to activate.
3. Follow the on-screen instructions to exit.

Reset Default

When you activate the **Reset Default**, the TV enters to first time installation.

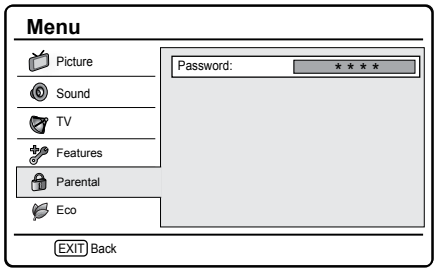
1. Press **MENU / EXIT** on the remote control and select **Features** > **Reset Default**.
2. Press **OK** or > to enter.
3. Select **OK** and press **OK** on your remote control to confirm.
4. Follow the on-screen instructions to reset your TV settings.

Parental

Lock TV channels or connected devices with a four digit code to prevent children from watching unauthorized content.

Access Parental menu

1. Press **MENU / EXIT** on the remote control and select **Parental**.
2. Press **OK** or > to highlight the password box.



3. Enter your password by using the **digit buttons** on the remote control. If your password is correct, the **Parental** menu appears.

NOTE:
- You have to enter a 4-digit password everytime to access **Parental** menu.
- Enter "0000" as the default password.
- If you forget your password, enter "5351" to override any existing passwords.

Lock one or more channels

1. Enter your password to access the **Parental** menu. (See page 17 ***"Access Parental menu"***)
2. Select **Channel Block** and press **OK** or > to enter the channel list.
3. Press ∧∨ to select one or more channels you preferred to lock.
4. Press **OK** to lock or unlock the channel you selected.
5. Follow the on-screen instructions to exit.

NOTE
- If you switch to the locked channel, you will be prompted to enter your password. (If your password is correct, the locked channel will be unlocked before the TV restarts from standby.)
- If your country selection is **Italy** (see page 12 ***"Step 2: Select your country"***), you will be prompted to enter your password every time you access each blocked channels.

To set parental ratings

Some digital broadcasters rate their programmes according to age. You can set TV to display only programmes with age ratings higher than your child's.

1. Enter your password to access the **Parental** menu. (See page 17 ***"Access Parental menu"***)
2. Press ∧∨ to select **Parental Guidance** and press **OK** or > to enter the **Age Rating** menu.
3. Press <> to select an age rating.
4. Follow the on-screen instructions to exit.

Lock one or more connected devices

1. Enter your password to access the **Parental** menu. (See page 17 ***"Access Parental menu"***)
2. Press ∧∨ to select **Input Block** and press **OK** or > to enter the input source list
3. Press ∧∨ to select one or more input source.
4. Press **OK** to lock or unlock your selected input source.
5. Follow the on-screen instructions to exit.

NOTE
- If you switch to the locked input source, you will be prompted to enter your password. (If your password is correct, the locked input source will be unlocked before the TV restarts from standby.)
- If your country selection is **Italy** (see page 12 ***"Step 2: Select your country"***), you will be prompted to enter your password every time you access each blocked input sources.

Set / Change password

1. Enter your password to access the **Parental** menu. (See page 17 ***"Access Parental menu"***)
2. Press ∧∨ to select **Set Password** and press **OK** or > to enter.
3. Enter your new password in the **New** box by using the **digit buttons** on the remote control.
4. Enter your new password again in the **Confirm** box.
5. When complete, the TV reruns to the **Parental** menu.
6. Repeat step 1 to 4 to change password.

Clear all parental settings

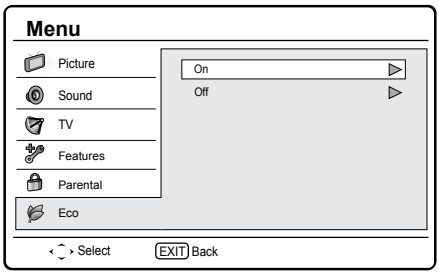
Reset all the settings in the **Parental** menu.

1. Enter your password to access the **Parental** menu. (See page 17 ***"Access Parental menu"***)
2. Press ∧∨ to select **Clear All** and press **OK** or > to enter.
3. Select **OK** and press **OK** on the remote control to clear all parental settings.

NOTE
If parental settings are cleared, you do not have to enter password to access **Channels** in the **TV** menu.

Eco

This function enables you to automatically reduce the backlight brightness in order to decrease the power consumption and increase the backlight life span.



Connecting external devices

Before connecting ...

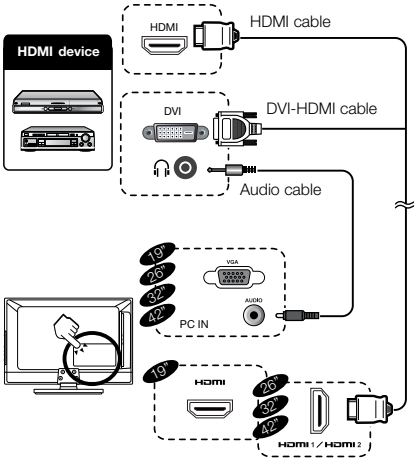
- Be sure to turn off the TV and any devices before making any connections.
- Firmly connect a cable to a terminal or terminals.
- Carefully read the operation manual of each external device for possible connection types. This also helps you get the best possible audiovisual quality to maximise the potential of the TV and the connected device.

HDMI connection

Example of connectable devices

● DVD ● Blu-ray player/recorder

The HDMI connections (High Definition Multimedia Interface) permit digital video and audio transmission via a connection cable from a player/recorder. The digital picture and sound data are transmitted without data compression and therefore lose none of their quality. Analogue/digital conversion is no longer necessary in the connected devices, which also would result in quality losses.



DVI/HDMI conversion

- Using an DVI/HDMI adapter cable, the digital video signals of a DVD can also be played via the compatible HDMI connection. The sound must be fed in additionally.
- Both HDMI and DVI use the same HDCP copy protection method.

Supported video signal:

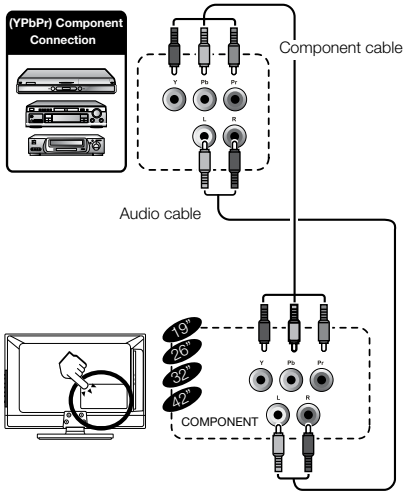
576p, 480p, 1080i, 720p, 1080p
See page 22 for PC signal compatibility.

YPbPr (Component connection)

Example of connectable devices

● VCR ● DVD ● Blue-ray player/recorder

You will enjoy accurate colour reproduction and high quality images through the (YPbPr) when connecting a DVD recorder or other recording equipment.



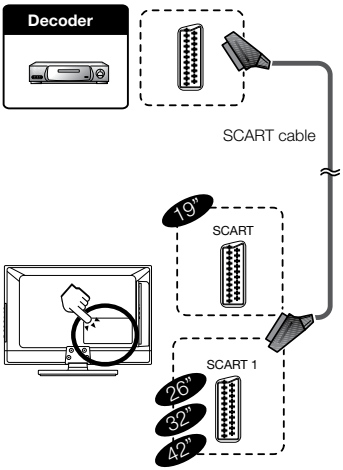
SCART connection

Example of connectable devices

● Decoder

● When using the SCART 1

Full SCART, which transmits RGB, S-Video and CVBS in, and CVBS tuner out.

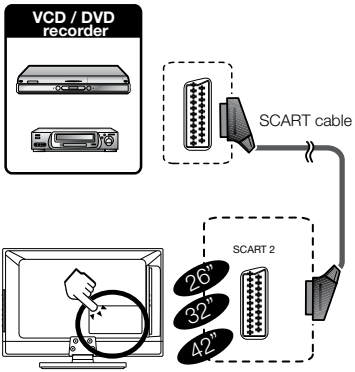


Example of connectable devices

● VCR ● DVD recorder

● When using the SCART 2

Half SCART, which transmits S-Video or CVBS in, and CVBS monitor out.



NOTE

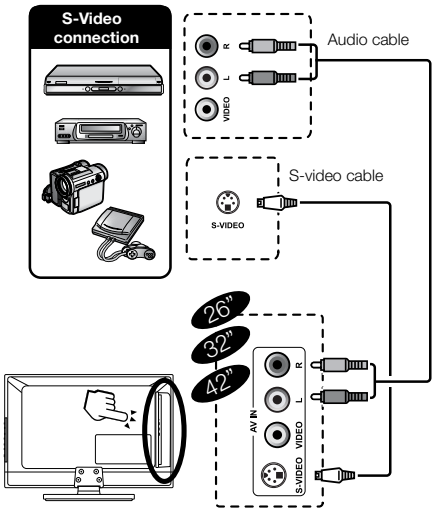
- In cases when the decoder needs to receive a signal from the TV, make sure to select the appropriate input source.
- Do not connect the decoder to the SCART 2.
- You cannot connect the VCR with Decoder using a fully wired SCART cable under the SCART 2 source.

S-Video connection

Example of connectable devices

● VCR ● DVD ● Blu-ray player/recorder
● Game concole ● Camcorder

You can use the S-Video when connecting to a game console, camcorder, a DVD recorder and some other equipment.

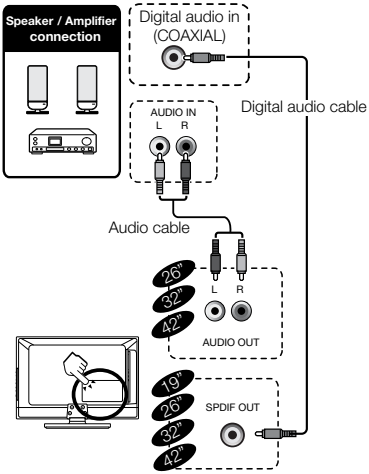


NOTE

- When using a S-video cable, you also need to connect an audio cable (R/L).

Speaker / Amplifier connection

Connecting an amplifier with digital audio input / analogue audio input

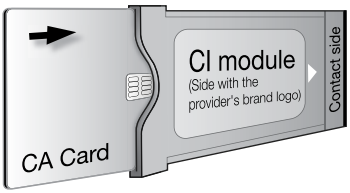


Inserting a CA Card

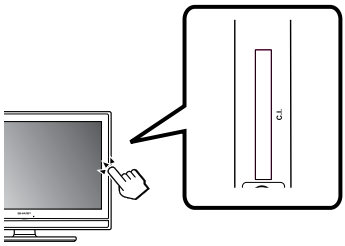
In order to receive coded digital stations, a Common Interface Module (CI Module) and a CA Card must be inserted in the CI slot of your TV set.
The CI Module and the CA Card are not supplied accessories. They are usually available from your dealer.

Inserting the CA Card into the CI Module

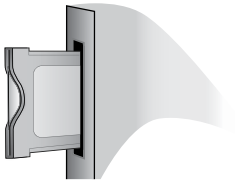
1. With the side with the gold coloured contact chip facing the side of the CI Module marked with the provider's logo, push the CA Card into the CI Module as far as it will go. Note the direction of the arrow printed on the CA card.



2. Inserting the CI Module in the CI slot



3. Carefully insert the CI Module in the CI slot with the contact side forward. The logo on the CI Module must be facing forward from the rear of the TV. Do not use excessive force. Make sure the module is not bent in the process.



Access CI Module service

After inserting and activating the CI Module, make sure the input source is **TV**.

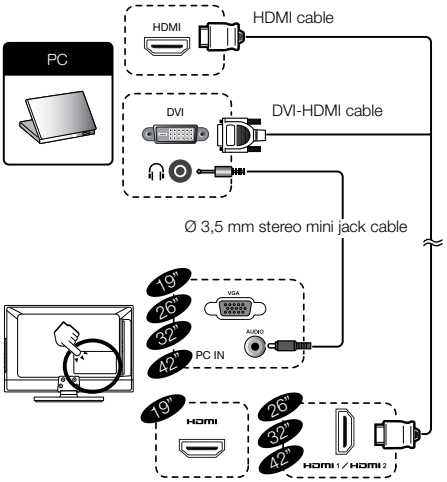
1. Press **MENU / EXIT** on the remote control.

2. Go to **Features** > **Common interface**.

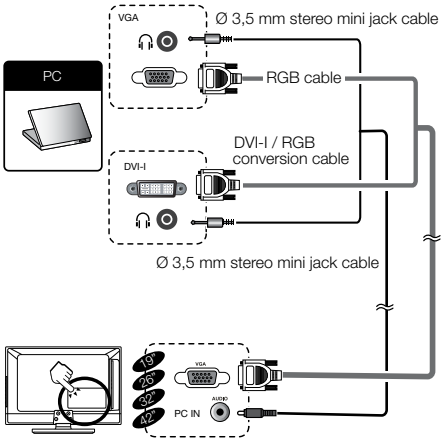
On-screen applications and content are provided by your digital TV service operator.

Connecting a PC

Digital connection



Analogue connection



Supported display resolutions

Computer formats (PC)

Resolution	Refresh rate
640 x 480	60Hz
800 x 600	56Hz
800 x 600	60Hz
1024 x 768	60Hz
1280 x 720	60Hz
1280 x 768	60Hz
1360 x 768	60Hz
1280 x 1024	60Hz (Only for 42”)
1920 x 1080	60Hz (Only for 42”)

Video formats

Resolution	Refresh rate
480i	60Hz
480p	60Hz
576i	50Hz
576p	50Hz
720p	50Hz, 60Hz
1080i	50Hz, 60Hz
1080p	(HDMI, Component only) 50Hz, 60Hz, 24Hz

Appendix

Troubleshooting

Problem	Possible Solution
No picture	1. Connect power cord correctly. 2. Turn on power. 3. Connect signal cable correctly. 4. Press any button on the LCD TV.
Abnormal colours	Connect signal cable correctly.
Twisted picture	1. Connect signal cable correctly. 2. Please use compatible signal.
Picture too dark	Adjust brightness and contrast.
Audio only, no images	1. Please check if input signal is connected correctly. 2. TV-RF signal must not be lower than 50dB.
Picture only, no audio	1. Connect signal cable correctly. 2. Adjust volume to proper level. 3. Connect audio signal cable correctly. 4. TV-RF signal must not be lower than 50dB.
Cannot use remote control	1. Please change battery. 2. Turn off power for 10 seconds; and then restart power.
Cannot receive sufficient channels through antenna	Please use the Channel scan function to increase the number of channels not included in memory.
No colour	Please adjust the colour setup.
Blinking picture accompanied by ghost image	1. Check the connection of antenna/signal cable. 2. Check if channel is in play mode. 3. Press signal source and change input mode.
Broken lines or segments	Adjust antenna. Keep the TV away from noise sources, such as automobiles, neon lights, and hair dryers.
Certain TV channels are blocked (Hope to acquire some channels)	Please use the Update scan method to add the channels not included in memory.
Overlapping images or ghost images	Please use multi-directional outdoor antenna. (If your TV is subject to the influence of nearby mountains or buildings).
Cannot use a function	If the item you choose turns gray, that item cannot be selected.
Cannot receive programmes	Please use the Update scan method to add the channels not included in memory.

Appendix

Specification

Item			19″ LCD COLOUR TV, Model: LC-19SH7E	26″ LCD COLOUR TV, Model: LC-26SH7E	32″ LCD COLOUR TV, Model: LC-32SH7E
LCD screen size			19″ diagonal	26″ diagonal	32″ diagonal
Number of dots			3,147,264 dots (1366 × 768 × 3 dots)	3,147,264 dots (1366 × 768 × 3 dots)	3,147,264 dots (1366 × 768 × 3 dots)
Video Colour System			PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60		
TV Function	TV-Standard	Analogue	CCIR (B/G, I, D/K, L/L')		
		Digital	DVB-T (2K/8K OFDM)		
	Receiving Channel	VHF/UHF	ATV : IRA-E69, DVB-T : E5-E69		
		CATV	S-band, S1–S41ch		
	TV-Tuning System		Auto Preset 999 ch, Auto Label, Auto Sort		
	STEREO/BILINGUAL		NICAM/A2		
Viewing angles			H : 170° V : 160°	H : 160° V : 150°	H : 176° V : 176°
Audio amplifier			3W × 2	5W × 2	5W × 2
Speaker			(128.8 mm × 40.2 mm) × 2	(164.5 mm × 42 mm) × 2	(164.5 mm × 42 mm) × 2
Rear	Antenna		UHF/VHF 75 Ω		
	RS-232C		3 pin connector (For service only)		
	SCART 1		SCART (AV input, Y/C input, RGB input, TV output)		
	SCART 2 (Only for 26" and 32")		SCART (AV input, Y/C input, monitor output [analogue source - ATV, SCART 1, SIDE AV; digital source - DTV])		
	PC IN		D-sub 15 pin (AV input), Ø 3.5mm jack (Audio input)		
	Component		Y/Pb(Cb)/Pr(Cr), RCA pin (L/R)		
	SPDIF		Digital audio output		
	AUDIO OUT		RCA pin (L/R)		
	AV OUT (Only for 19")		RCA pin (AV output)		
	HDMI 1				
	HDMI 2 (Only for 26" and 32")				
Side	C. I. (Common Interface)		EN50221, R206001		
	Headphones		Ø 3.5mm jack (Audio output)		
	AV IN		RCA pin (AV input). S-VIDEO ([Y/C input], Only for 26" and 32")		
	HDMI 3 (Only for 32")				
OSD language			English, German, French, Italian, Dutch, Spanish, Greek, Portuguese, Swedish, Finnish, Russian, Polish, Turkish, Hungarian, Czech, Slovak, Danish, Norwegian, Estonian, Latvian, Lithuanian, Slovenian, Bulgarian, Croatian, Romanian, Serbian, Ukrainian, Gaelic.		
Power Requirement			AC 220–240 V, 50 Hz		
Power Consumption			45W (Standby < 0.3W) (Method IEC62087)	55W (Standby < 0.3W) (Method IEC62087)	135W (Standby < 0.3W) (Method IEC62087)
Weight			3.8 kg (Without stand), 4.0 kg (With stand)	7.3 kg (Without stand), 8.4 kg (With stand)	11.0kg (Without stand), 12.4 kg (With stand)
Operating temperature			0°C to +40°C		

Appendix

Specification

Item			42″ LCD COLOUR TV, Model: LC-42SH7E
LCD screen size			42″ diagonal
Number of dots			6,220,800 dots (1920 × 1080 × 3 dots)
Video Colour System			PAL/SECAM/NTSC 3.58/NTSC 4.43/PAL 60
TV Function	TV-Standard	Analogue	CCIR (B/G, I, D/K, L/L')
		Digital	DVB-T (2K/8K OFDM)
	Receiving Channel	VHF/UHF	ATV : IRA-E69, DVB-T : E5-E69
		CATV	S-band, S1–S41ch
	TV-Tuning System		Auto Preset 999 ch, Auto Label, Auto Sort
	STEREO/BILINGUAL		NICAM/A2
Viewing angles			H : 176° V : 176°
Audio amplifier			10W × 2
Speaker			(166 mm x 55mm) x 2
Rear	Antenna		UHF/VHF 75 Ω
	RS-232C		3 pin connector (For service only)
	SCART 1		SCART (AV input, Y/C input, RGB input, TV output)
	SCART 2		SCART (AV input, Y/C input, monitor output [analogue source - ATV, SCART 1, SIDE AV; digital source - DTV])
	PC IN		D-sub 15 pin (AV input), Ø 3.5mm jack (Audio input)
	Component		Y/Pb(Cb)/Pr(Cr), RCA pin (L/R)
	SPDIF		Digital audio output
	AUDIO OUT		RCA pin (L/R)
	HDMI 1		
	HDMI 2		
Side	C. I. (Common Interface)		EN50221, R206001
	Headphones		Ø 3.5mm jack (Audio output)
	AV IN		RCA pin (AV input). S-VIDEO (Y/C input)
	HDMI 3		
OSD language			English, German, French, Italian, Dutch, Spanish, Greek, Portuguese, Swedish, Finnish, Russian, Polish, Turkish, Hungarian, Czech, Slovak, Danish, Norwegian, Estonian, Latvian, Lithuanian, Slovenian, Bulgarian, Croatian, Romanian, Serbian, Ukrainian, Gaelic.
Power Requirement			AC 220–240V, 50 Hz
Power Consumption			170 W (Standby < 0.3W) (Method IEC62087)
Weight			16.5kg (Without stand), 19.1 kg (With stand)
Operating temperature			0°C to +40°C

- As a part of policy of continuous improvement, SHARP reserves the right to make design and specification changes for product improvement without prior notice. The performance specification figures indicated are nominal values of production units. There may be some deviations from these values in individual units.

NOTE
- Refer to the inside back cover for dimensional drawings.
- Audio cannot be output through the HDMI terminal.

Appendix

Environmental specifications

Item		19”	26”	32”	42”
***1 On-Mode (W)**	Vivid	40W	53W	114W	152W
***2 Energy-Save-Mode (W)**	Eco > On	26W	36W	75W	83W
***3 Standby-Mode (W)**		0.3W	0.3W	0.3W	0.3W
***4 Off Mode (W)**	Power button	0.29W	0.29W	0.29W	0.29W
***5 Annual Energy Consumption (kWh)**		58.4kWh	77.4kWh	166.4kWh	221.9kWh
***6 Annual Energy Consumption (kWh) (Energy-Save-Mode)**	Eco > On	37.9kWh	52.6kWh	109.5kWh	121.2kWh

*1 Measured according to IEC 62087 Ed. 2

*2 For further information about the Energy Save function, please see related pages in this operation manual

*3 Measured according to IEC 62301 Ed. 1

*4 Measured according to IEC 62301 Ed. 1

*5 Annual energy consumption is calculated on the basis of the On-Mode (Vivid) power consumption, watching TV 4 hours a day, 365 days a year

*6 Annual energy consumption is calculated on the basis of the Energy-Save-Mode power consumption, watching TV 4 hours a day, 365 days a year.

NOTE

- The power consumption of On-Mode varies depending on the images the TV displays.

Other information

Cautions regarding use in high and low temperature environments

- When the unit is used in a low temperature space (e.g. room, office), the picture may leave trails or appear slightly delayed. This is not a malfunction, and the unit will recover when the temperature returns to normal.
- Do not leave the unit in a hot or cold location. Also, do not leave the unit in a location exposed to direct sunlight or near a heater, as this may cause the cabinet to deform and the LCD panel to malfunction.
- Storage temperature: + 5°C to +35°C.

Information on the software license for this product

Software composition

The software included in this product is comprised of various software components whose individual copyrights are held by SHARP or by third parties.

Software developed by SHARP and open source software

The copyrights for the software components and various relevant documents included with this product that were developed or written by SHARP are owned by SHARP and are protected by the Copyright Act, international treaties, and other relevant laws. This product also makes use of freely distributed software and software components whose copyrights are held by third parties. These include software components covered by a GNU General Public License (hereafter GPL), a GNU Lesser General Public License (hereafter LGPL) or other license agreement.

Acknowledgements

The following open source software components are included in this product:

• linux kernel • modutils • glibc • zlib • libpng

Appendix

Trademarks

- "HDMI, the HDMI logo and High-Definition Multimedia Interface are trademarks or registered trademarks of HDMI Licensing LLC."

- The "HD ready" Logo is a trademark of EICTA.

- The "HD TV" Logo is a trademark of EICTA.

- The "HD TV 1080p" Logo is a trademark of EICTA.

- The DVB logo is the registered trademark of the Digital Video Broadcasting - DVB - project.

- Manufactured under license from Dolby Laboratories.
- "Dolby" and the double-D symbol are trademarks of Dolby Laboratories.

Attention: Your product is marked with this symbol. It means that used electrical and electronic products should not be mixed with general household waste. There is a separate collection system for these products.

A. Information on Disposal for Users (private households)

1. In the European Union

Attention: If you want to dispose of this equipment, please do not use the ordinary dust bin!

Used electrical and electronic equipment must be treated separately and in accordance with legislation that requires proper treatment, recovery and recycling of used electrical and electronic equipment.
Following the implementation by member states, private households within the EU states may return their used electrical and electronic equipment to designated collection facilities free of charge*. In some countries* your local retailer may also take back your old product free of charge if you purchase a similar new one.
*) Please contact your local authority for further details.

If your used electrical or electronic equipment has batteries or accumulators, please dispose of these separately beforehand according to local requirements.

By disposing of this product correctly you will help ensure that the waste undergoes the necessary treatment, recovery and recycling and thus prevent potential negative effects on the environment and human health which could otherwise arise due to inappropriate waste handling.

2. In other Countries outside the EU
If you wish to discard this product, please contact your local authorities and ask for the correct method of disposal.

For Switzerland: Used electrical or electronic equipment can be returned free of charge to the dealer, even if you don't purchase a new product. Further collection facilities are listed on the homepage of www.swico.ch or www.sens.ch.

B. Information on Disposal for Business Users

1. In the European Union

If the product is used for business purposes and you want to discard it:

Please contact your SHARP dealer who will inform you about the take-back of the product. You might be charged for the costs arising from take-back and recycling. Small products (and small amounts) might be taken back by your local collection facilities.
For Spain: Please contact the established collection system or your local authority for take-back of your used products.

2. In other Countries outside the EU

If you wish to discard of this product, please contact your local authorities and ask for the correct method of disposal.

For EU: The crossed-out wheeled bin Implies that used batteries should not be put to the general household waste ! There is a separate collection system for used batteries, to allow proper treatment and recycling in accordance with legislation.

Please contact your local authority for details on the collection and recycling schemes.

For Switzerland: The used battery is to be returned to the selling point.

For other non-EU countries: Please contact your local authority for correct method of disposal of the used battery.